DATA SHEET

PRIMERGY TX200 S5

Issue: September 2009

Dual Socket Intel® Xeon® processor server - well-balanced price-performance

PRIMERGY TX industry standard tower servers: efficient, rock solid, record-breaking performance. PRIMERGY TX servers benefit from over 20 years pioneering work in the field of Green IT. That is how TX servers reach industry – leading performance per watt ratios, lowering the environmental impact and running costs. TX servers can easily be managed locally or remotely via the PRIMERGY ServerView Suite, saving IT admin costs. That's efficient performance. Our made-to-measure service packages take care of your system every step of the way. Rest assured, PRIMERGY TX servers are put through 5000 boot cycles - that's rock solid performance. PRIMERGY TX servers are flexible systems capable of using up to two processors and up to 20 hard disks. Tower to rack mounting kits are available for most TX systems to help you move to a consolidated rack infrastructure. TX servers have a tradition of setting record-breaking performance levels. So, whether you use them as tower or rack servers, for file, print or application purposes, you will benefit from record-breaking performance. PRIMERGY TX: a tower of strength.

PRIMERGY TX200 S5

The PRIMERGY TX200 S5 is a perfect server for small or decentralized infrastructures in an attractive family design. The PRIMERGY TX200 S5 offers expandability, energy efficiency and dual processor performance. With up to 16 2.5" hard disks, you can save on an external storage unit. The high energy efficiency minimizes costs. Moreover, a maximum of 96GB of RAM, redundancy features, and dual-processor performance allow you to make a great start into virtualization. The PRIMERGY TX200 S5 also lends itself as a departmental, email or web server. A tower to rack conversion kit protects your investment's lifetime. This great system strikes the right balance between price and performance.

MAIN FEATURES	BENEFITS
Xeon® 5500 series Dual, Quad or Turbo Quad-Core processors with Turbo Boost technology, Demand Based Switching, QuickPath Interconnect (QPI) and Internal Memory Management Unit	Higher overall productivity thanks to excellent CPU performance.
Up to 96GB RAM configurable in independent, mirrored, spare or performance modes	Plenty of memory configurable to suit your every need.
Hot-plug power supply with 89% efficiency (85% efficiency for standard power supply)	Save energy costs and minimise environmental impact
Up to 4 (6 optional) 3,5" hard disks or 8 (16 optional) 2,5" SAS or SATA hard disk drives and 6 expansion slots (4 PCIe Gen 2, 1 PCIe, 1 PCI)	Choose among a range of expansion variables to suit your budget and requirements.
Hot-plug hard disks (standard), hot-plug redundant power supply unit (optional), redundant fans (optional), ServerView Local Service Panel (LSP) (optional)	Tailor made availability, offering the security level you need.

Technical details

Mainboard	
Mainboard type	D 2709
Chipset	Intel® 5500
Processor quantity and type	1 - 2 x Intel® Xeon® processor 5500 series
Processor options	Intel® Xeon® E5502 2C/2T, 1.86 GHz, SLC: 2 x 256 KB, TLC: 4 MB (Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
	Intel® Xeon® E5504 4C/4T, 2.00 GHz, SLC: 4 x 256 KB, TLC: 4 MB (Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
	Intel® Xeon® E5506 4C/4T, 2.13 GHz, SLC: 4 x 256 KB, TLC: 4 MB (Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 80 W)
	Intel® Xeon® E5520 4C/8T, 2.26 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
	Intel® Xeon® E5530 4C/8T, 2.40 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
	Intel® Xeon® E5540 4C/8T, 2.53 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 80 W)
	Intel® Xeon® L5506 4C/4T, 2.13 GHz, SLC: 4 x 256 KB, TLC: 4 MB (Turbo: No, 4.8 GT/s, Mem bus: 800 MHz, 60 W)
	Intel® Xeon® L5520 4C/8T, 2.26 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 60 W)
	Intel® Xeon® L5530 4C/8T, 2.40 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 1/1/2/2, 5.86 GT/s, Mem bus: 1066 MHz, 60 W)
	Intel® Xeon® X5550 4C/8T, 2.66 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
	Intel® Xeon® X5560 4C/8T, 2.80 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
	Intel® Xeon® X5570 4C/8T, 2.93 GHz, SLC: 4 x 256 KB, TLC: 8 MB (Turbo: 2/2/3/3, 6.4 GT/s, Mem bus: 1333 MHz, 95 W)
Memory slots	12 (6 DIMMs per CPU, 3 channels with 2 slots per channel)
Memory slot type	DIMM (DDR3) registered
Memory capacity (min. - max.)	1 GB - 96 GB
Memory protection	Advanced ECC Memory Scrubbing SDDC (Chipkill™) Hot-spare memory support Memory Mirroring support
Memory notes	max. 96 GB registered, min. 1 GB unbuffered; memory mirroring with 2 identical modules, hot-spare memory with three identical modules per channel
Memory Modules Independent Mode	1 GB (1 module(s) with 1 GB) DDR3, unbuffered, ECC, 1066 MHz, PC3-8500
	2 GB (1 module(s) with 2 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	2 GB (1 module(s) with 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
	2 GB (1 module(s) with 2 GB) DDR3, unbuffered, ECC, 1066 MHz, PC3-8500
	4 GB (1 module(s) with 4 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	4 GB (1 module(s) with 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
	8 GB (1 module(s) with 8 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	8 GB (1 module(s) with 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
Memory Modules Mirrored Mode	4 GB (2 module(s) with 2 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	4 GB (2 module(s) with 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
	8 GB (2 module(s) with 4 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	8 GB (2 module(s) with 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
	16 GB (2 module(s) with 8 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	16 GB (2 module(s) with 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600

Memory Modules Performance Mode	6 GB (3 module(s) with 2 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	6 GB (3 module(s) with 2 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
	12 GB (3 module(s) with 4 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	12 GB (3 module(s) with 4 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
	24 GB (3 module(s) with 8 GB) DDR3, registered, ECC, 1066 MHz, PC3-8500
	24 GB (3 module(s) with 8 GB) DDR3, registered, ECC, 1333 MHz, PC3-10600
Interfaces	
USB ports	10 x USB 2.0 (3x front USB, 4x rear USB 3x intern for Backup, USSD and internal USB)
Graphics (15-pin)	1 x VGA
Serial 1 (9-pin)	1 x serial RS-232-C (9 pin), usable for iRMC S2 or System or common use
Serial 2 (9-pin)	1 x serial RS-232-C (9 pin), optional - occupies an unused slot
LAN / Ethernet (RJ-45)	1 x Gbit/s Ethernet (Intel Hartwell)
Service LAN (RJ45)	1 x dedicated Service LAN port for iRMC (10/100 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port
Onboard or integrated Controller	
SATA Controller	ICH10R, 6-port SATA (4x for internal hard disks, 2x for accessible drives)
Remote Management Controller	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible
Trusted Platform Module (TPM)	Infineon / separate module; TCG V1.2 compliant (option)
Slots	
PCI-Express Gen2 x4	2 x full height (1x long, 1x short)
PCI-Express Gen2 x8	2 x full height (1x notched, thus usable for x16 cards operating in x8 mode)
PCI-Express x4 (mech. x8)	1 x full height
PCI slots	1 x
Slot Notes	PCI slot: 32-bit / 33 MHz, 5 V; in SAS-configurations 1x PCI-Express slot is occupied by the modular RAID-Controller
Drive bays	
Hard disk bay configuration	4x 3,5-inch, for SAS / SATA or 8x 2,5-inch for SAS/SATA optional
Accessible drive bays	3 x 5.25/1.6-inch
Notes accessible drives	All possible options described in relevant system configurator.
Optional hard disk bays	2 x 3.5-inch hot-plug SAS/SATA or 8x 2.5-inch hot-plug SAS in HDD box (occupies 2x 5.25-inch bays)
Fan Configuration	
Fan configuration	2 standard fans or 2 redundant fans (only available in combination with hot plug redundant power supply)
Operating panel	
Operating buttons	On/off switch NMI button Reset button
Status LEDs	System status (amber / yellow) Identification (blue) Hard disks access (green) Power (amber / green) At system rear side: System status (amber / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)
Service display	Optional: ServerView Local Service Panel (LSP)
BIOS	
BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support

Supported operating systems	
Supported operating systems	Microsoft® Windows Server® 2003 Microsoft® Windows Server® 2008 Novell SUSE Linux Enterprise Server Red Hat Enterprise Linux VMware Infrastructure Note: Support of other Linux derivatives on demand
Operating system release link	http://ts.fujitsu.com/software http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421

Server Management	
Standard	ASR&R PDA
Option	ServerView Deployment Manager (fully functional unlimited version) ServerView Remote Management ServerView Integration for Tivoli TEC®, Tivoli NetView, HP OpenView NNM and HP OpenView iRMC S2 Advanced Pack
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.

Dimensions / Weight	
Floor-stand (W x D x H)	205 (306) x 615 x 444 mm
Rack (W x D x H)	486 x 636 x 220 mm
Dimension notes	Floorstand Width 306 mm with tilt protection
Mounting Depth Rack	596 mm
Height Unit Rack	5 U
Weight	up to 36,8 kg
Weight notes	Weight may vary depending on actual configuration
Rack integration kit	Rack integration kit as option

Floor-stand (W x D x H)	
Rack (W x D x H)	

Environmental	
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	34 dB(A) (idle) / 36 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	5.2 B (idle) / 5.7 B (operating)
Noise notes / description	measured with standard fans and PSU
Operating ambient temperature	10 - 35°C
Operating relative humidity	10 - 85 % (non condensing)

Electrical values	
Power supply configuration	1 standard, 1 redundant or 2 redundant
Max. output of power supply	685 W
Standard power supply output	700 W
Hot-plug power supply output	800 W
Hot-plug power supply redundancy	Yes
Rated voltage range	100 - 240 V
Rated frequency range	50 - 60 Hz
Rated current max.	9.5 - 4.0A
Rated current in basic configuration	1,3 0.6A
Active power max. (per system unit)	461 W
Apparent power max. (per system unit)	490 VA
Heat emission	1659.6 kJ/h (1573.4 BTU)

Compliance	
Germany	TÜV GS
Europe	CE

Compliance	
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronical equipment)
Japan	VCCI class A
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Components

Hard disk drives	SATA, 3 Gb/s, 750 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 500 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 250 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 1 TB, 7200 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 450 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 300 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 300 GB, 10000 rpm, hot plug, 2.5-inch
	SAS, 3 Gb/s, 146 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 146 GB, 15000 rpm, hot plug, 2.5-inch
	SAS, 3 Gb/s, 146 GB, 10000 rpm, hot plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 73 GB, 15000 rpm, hot plug, 2.5-inch
	SAS, 3 Gb/s, 73 GB, 10000 rpm, hot plug, 2.5-inch
Tape Drives	DDS Gen5, 36 GB , 3 MB/s, half height, USB 2.0
	DDS Gen6, 80 GB , 6 MB/s, half height, SCSI U160
	DDS Gen6, 80 GB , 6 MB/s, half height, USB 2.0
	LTO2HH Ultrium, 200 GB , 24 MB/s, half height, SCSI U160
	LTO3HH Ultrium, 400 GB , 60 MB/s, half height, SAS 3Gb/s
	LTO3HH Ultrium, 400 GB , 60 MB/s, half height, SCSI U320
	LTO4HH Ultrium, 800 GB , 120 MB/s, half height, SAS 3Gb/s
	RDX Drive, 80 GB, 160 GB, 320 GB , 25 MB/s, half height, USB 2.0
Optical drives	Blu-ray combo drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	Blu-ray combo drive, (6x BD-ROM; 16x DVD; 40x CD), half height, SATA I
	DVD-ROM, (16xDVD; 48xCD), half height, SATA I
	DVD Super Multi, (16xDVD, 8xDVD+RW 6xDVD-RW, 12xDVD-RAM; 48xCD, 32xCD-RW), half height, SATA I
	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
SCSI / SAS Controller	SCSI Ctrl 320 MB 1ch int/ext PCIe x1
	SAS Ctrl 3 Gb 4 ports int. / 4 ports ext. PCIe x4
RAID Controller	RAID 5/6 Ctrl, SAS/SATA 3 Gb, LSI MegaRAID SAS8880E, 8 ports ext. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, no BBU support (based on LSI 1078)
	Integrated RAID 5/6 Ctrl, SAS/SATA 3 Gb, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 512 MB Cache, optional BBU (based on LSI 1078)
	Integrated RAID 5/6 Ctrl, SAS/SATA 3 Gb, 8 ports int. RAID level: 0, 1, 10, 5, 50, 6, 60, 256 MB Cache, optional BBU (based on LSI 1078)
	Integrated RAID 0/1 Ctrl, SAS/SATA 3 Gb, 8 ports int. RAID level: 0, 1, 1E, no BBU support (based on LSI 1068e)
	Integrated RAID 0/1 Ctrl, SAS/SATA 3 Gb, 4 port int. RAID level: 0, 1, 1E, no BBU support , for internal SAS tapes (based on LSI 1064e)

Fibre Channel controller	Fibre Channel Ctrl 1 x 4 Gb Emulex LPe1150 MMF LC
	Fibre Channel Ctrl 2 x 4 Gb Emulex LPe11002 MMF LC
	Fibre Channel Ctrl 1 x 4 Gb Qlogic QLE2460 MMF LC
	Fibre Channel Ctrl 2 x 4 Gb Qlogic QLE2462 MMF LC
	Fibre Channel Ctrl 2 x 8 Gb Emulex LPe12002 MMF LC
LAN Controller	Ethernet Ctrl 1 x 1 Gb Intel® Gigabit CT Desktop Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PF Server Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PT Server Adapter
	Ethernet Ctrl 2 x 10 Gb Intel® 10 Gigabit XF SR Dual Port Server Adapter
	Ethernet Ctrl 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter
	Ethernet Ctrl 4 x 1 Gb Intel® PRO/1000 PT Quad Port Server Adapter
Rack infrastructure	Cable Arm 2U for 3rd party racks
	Cable Management for 19-inch DataCenter / PRIMECENTER Racks

Warranty	
Standard Warranty	3 years
Service level	On-site Service
Maintenance and Support Services - the perfect extension	
Recommended Service	7x24, Onsite Response Time: 4h
Service Weblink	http://ts.fujitsu.com/Supportservice

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:
http://ts.fujitsu.com/aboutus
Take back and Recycling information:
http://ts.fujitsu.com/recycling

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded.
Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.
For further information see http://ts.fujitsu.com/terms_of_use.html
Copyright © Fujitsu Technology Solutions September 2009

Published by
Fujitsu Technology Solutions
http://ts.fujitsu.com